1: Conzemius M-4, 5 (1921) 1932
SA15 Mosquito SA15

231 439 According to Belt (204) the Sumu living on the upper Rio Grande used to come periodically to the Spanish settlements in order to obtain dogs. They would barter a gun or a large iron pot for a single dog, if it was of the right color. Some Ladinos around Olama had even in those days commenced to rear dogs to supply the demand. These Indians had a special liking for black ones, and did not value those of any other color so much. Lehmann (c: I, 405) states that [764] the Miskito formerly buried a red dog (*pâuan*) with a dead person, in order to serve the latter on his voyage to the underworld. However, the writer has never observed that either Sumu or Miskito have a preference for a certain color.

231 There is no record of the former existence on the Mosquito Coast of the "xulo" (xolotl) or barkless dog, which was tamed in the Pacific region of Nicaragua at the time of the conquest. The native names of the common dog (M.: *yul;* S.: *sul, sulu, solo*) bear a close affinity to that Nahuatl word. Allen has identified the barkless dog in question with the raccoon, which is, however, called *suksuk* by both Miskito and Sumu.

AGRICULTURE

241 Agriculture is not as highly developed on the Mosquito Coast as in the remainder of Honduras and Nicaragua; it furnishes, nevertheless, the principal means of subsistence.

PREPARING THE PLANTATION.—In order to make their plantation (M.: *insla;* S.: *yamak*) the Indians cut down a patch of the forest, generally on the bank of a navigable stream. The rough work, that is the felling of the trees and the clearing of the ground, is essentially man's work. The large hardwood trees are usually left standing, but all the other giants of the forest are cut down. This work takes place at the beginning of the dry season, about February or March. Toward the beginning of May fire is set to the tangled mass. When the ground has thus been prepared by the men, the women take charge of the future plantation, the planting and cutting down of the grass and weeds being their occupation. Sometimes the man and wife do the planting together. The harvesting is the work of the females.

The ax, machete, and "barreta" or pointed digging stick are the only agricultural implements. The great heat and moisture with the comparatively uniform temperature all the year round enable a constant succession of vegetation, and trees may bear fruit at all seasons. The soil is in general very fertile, but large areas of the country are covered with savannas with sandy and gravelly soil, which is entirely unfit for cultivation and produces only scanty grass, pines, oaks, and various species of scrubby plants. The Indians from this part of the country are therefore compelled to make their planta-

1: Conzemius M-4, 5 (1921) 1932
SA15 Mosquito SA15

tions on the edge of the rivers, often at a considerable distance from their villages.

INFLUENCE OF CULTIVATION UPON THE FOREST.—The bush, which springs up again from the seeds of the forest trees germinating in the ground, is cut down from time to time. After two or three crops have been obtained from the plantation, a variety of weedy-looking shrubs and grass begins to get a hold upon the land. The plantation is then abandoned, as the Indian does not consider it worth while to undertake the great amount of labor needed to keep the ground clear. He prefers to prepare a new plantation (M.: *insla disañ;* S.: *yamak wisam*) by cutting down another patch of the virgin forest, where he is sure of a better crop.

The brushwood springing up in the abandoned plantation (M.: *insla prata;* S.: *yamak ba*), being not interfered with any longer, gradually chokes off the grass and weeds. As a number of the larger hardwood trees had been left standing in the first place, such an abandoned plantation will, after 15 or 20 years, not differ essentially from the surrounding primeval forest. It may then be cut again for the making of a new plantation. As the country is sparsely inhabited, the Indians will always find virgin forest within close distance from their home; besides, many of them are seminomadic and change their village sites from time to time. Were they to make their plantations for a long-continued period on the same spot, cutting down the brushwood again and again, a great change would gradually take place. The soil not containing any more seeds of forest trees, grass and a scrubby vegetation would in time spring up. This may be observed around certain villages, where by this manner the forest has been beaten back, inch by inch, gradually but surely.

BANANAS AND PLANTAINS.—It is noteworthy that the most important food plant of the Sumu and of the Miskito living toward the interior, the banana (M.: *siksa;* S.: *wakisa, pasa, iñkini*), is not indigenous to America. It was apparently brought by the Spaniards from the Canary Islands during the early part of the discovery, first to Santo Domingo (Haiti), and from there to the mainland. According to the testimony of the buccaneers of the latter part of the seventeenth century, bananas and plantains were already cultivated in those days by the Miskito of Cabo Gracias a Dios. Raveneau de Lussan (429) saw in 1688 many bananas on the banks of Rio Coco, and states that they had been planted by the Albaotins (= Sumu) and by the river currents. He also found this plant cultivated by the Mulattoes living around Cabo Gracias a Dios (438). Dampier (I, 9–10) mentions plantains among the Miskito, but he does not say anything about bananas. Exquemelin (English edit.: 114, 251), on the other hand, who visited the coast in 1671 and 1672, saw bananas, plantains, and

2: Kirchhoff E-4 (no date) 1948
SA15 Mosquito SA15
Garif SA12

THE CARIBBEAN LOWLAND TRIBES: THE MOSQUITO, SUMO, PAYA, AND JICAQUE

By PAUL KIRCHHOFF

INTRODUCTION

M
101 The modern *Paya* and *Jicaque* enclaves in the Caribbean Lowlands may
171 not all be the descendants of the people so named by the first explorers
177 (maps 2 and 5). It is possible that the culture of the people first discovered on the coast was similar to that from which the present-day *Mosquito* and *Sumo* culture has evolved, although the north coast probably had culture traits that differed significantly from those of the *Mosquito* and *Sumo*. It is impossible to describe the post-Conquest changes of the culture of the *Paya* and *Jicaque*. It seems reasonably certain, however, that during the past 400 years the east coast people and the people now known as the *Paya* and *Jicaque* have converged culturally. We can, then, describe these peoples as a unit, although hypothetically their cultures have developed out of the ruins of a more complex aboriginal
G background.
177 Less important but significant features of the culture may be ascribed
175 to the contact with the *Black Carib* Indians, who were brought to the Bay Islands in 1796 and whose descendants have settled on the mainland. The importance of the early Negro influence has already been noted.

CULTURE

SUBSISTENCE ACTIVITIES

M
241 **Farming.**—A type of slash-and-burn agriculture is employed by all tribes. Every season the men clear new farmlands and burn the slash. Planting and cultivating is done with a digging stick. This is woman's work, except among the *Jicaque* (Von Hagen, 1943), and the women also harvest the crops. Some fields have combinations of crops, such as maize, beans, and peanuts; others are reserved for single crops, especially the tubers.

G A list of agricultural products may be found below. Sweet manioc,
[241 an important *Mosquito* crop, is grown by all tribes. Bitter manioc, prob-
177] ably introduced by the *Carib*, is important to some *Paya* and *Jicaque*.

2: Kirchhoff E-4 (no date) 1948
SA15 Mosquito SA15

241 Maize is believed to be unimportant except in the higher lands, e.g., among the *Ulua*. The *Jicaque* grow it as a commercial crop but do not use it extensively as food. Pineapples are important to the *Paya*. Chili peppers and opuntia, the latter used for raising cochineal, a dye-producing insect, appear to be recent introductions. Plants introduced by the Europeans vary in importance, but plantain is now one of the most basic foods of the region. Quantities of wild foods of all kinds form an important part of the diet.

Hunting.—The bow and arrow was once important to many tribes but has been partially or wholly replaced by the gun. The bow has not been reported from the Corn Islands. Spears or javelins were formerly used for hunting. Slings, traps, and snares were used principally for birds. For the blowgun, see page 224.

LIST OF FOODS GROWN BY THE PEOPLE IN THE CARIBBEAN LOWLANDS:

AMERICAN ORIGIN:
- Sweet manioc.
- Bitter manioc.
- Maize.
- Pejivalle (pejibaye) palm.
- Sweetpotato.
- Edible (tania).
- Gourd.
- Pumpkin.
- Squash.
- Chayote.
- Tomato.
- Beans (red and black).
- Pineapple.
- Tobacco.
- Cotton.
- Achiote (*Bixa orellana*).
- Cacao.
- Potato.
- Papaya.
- Avocado.
- Guava.
- Chirimoya.
- Zapote.
- Coconut.
- Usi.
- Ficus.
- Yam.
- Opuntia.
- Peanuts.

FOREIGN ORIGIN:
- Rice.
- Sugarcane.
- Coffee.
- Mango.
- Breadfruit.
- Tamarind.
- Citrus fruits.
- Plantain.
- Banana.

224 Hunting is exclusively a male occupation. Communal hunts lasting several days and hunting by torchlight have been reported. Dogs are used frequently to chase the game. Hunters may imitate the calls of animals, sometimes using bone whistles.

226 **Fishing.**—Women fish with hooks, which were originally made of bone. Men fish in groups of varying sizes. Fish are shot with the bow and arrow, speared with single- or multipronged spears, taken with traps of various types, or frightened so that they jump into canoes. Torches are used at night to attract the fish. Fish are poisoned by parties of men. Women and men whose wives are pregnant or menstruating cannot join such expeditions (*Jicaque*). Rotenone-bearing plants are crushed in the water above a weir from which the stupefied fish are removed.

3: Pijoan D-5 (ca. 1945) 1946
SA15 Mosquito SA15

cattle and other goods for objects of cheap manufacture. Yet these objects may be of real intrinsic value to the Indians and under such circumstances it is difficult to judge with fairness. However, in the larger settlements Indians have learned the true cost of materials and considerable agitation occurs in trading. Payment for services performed in isolated communities can be accomplished by the use of such commodities as salt and tobacco. In fact, many will prefer these to actual money: in the more remote areas money per se is meaningless and payment is performed with gifts.

These days there is an ever increasing want of objects from the outside world. The items most desired are salt, machetes, axes, knives, adzes, hoes, iron cooking pots, stoves, fish hooks, files, shotguns, ammunition, cotton goods, ribbons, blue dungarees, looking glasses, combs and tobacco. Cereal grains and flour are also desired.

The enterprise of the Indian today is centered mainly around the creation of useful objects. Such objects, therefore, are often used for exchange purposes. Stone work is limited to the manufacture of crude metates or maize grinders (walpa-akbaya) which are used for grinding maize. In the northern part of the Miskito coast a coarse brownish cloth is pounded from the inner bark of a tree closely resembling the rubber trees (*Castilla* sp.). The cloth as well as the tree is referred to as *tunu* or *tikam*. The bark cloth is made into sheets or blankets for bed use or into loin cloths (*palpura*). This cloth is of high value. Pottery once a valuable commodity to these Indians is not alonger made.

Today the main enterprise for the Miskito Indians for barter, exchange or payment are as follows: rubber collecting, banana agriculture, boat making, mine working, cattle and pig raising, general work on rivers, fur from wild animals, and general labor. However, it is to be noted that the Indian could and does in most instances subsist on his immediate environment.

VEGETABLE FOODS

Agriculture is not highly developed on the Mosquito coast, because the many plant-destroying insects limit the process of cultivable products, and the bush springs up early after the ground has been cleared. Thus after two or three crops have been obtained from a plantation (*kanana*), a variety of weedy looking shrubs and grass, which make cultivation difficult, gets a hold on the land. The Indian then does not consider it worthwhile to undertake the labor needed to keep the ground clear but prefers to set up a new plantation (*insla*) by cutting down a patch of usable forest.

3: Pijoan D-5 (ca. 1945) 1946
SA15 Mosquito SA15

The most important fruit plant of the Miskito is the banana *(sikssa)*. It is not indigenous to America but was brought by the Spaniards. The banana tree produces one good crop and the new shoots appearing at its base are transplanted for another crop. Of the great variety of bananas and plantains grown by the Indians the most common is the *Gros Michel*. Sweet cassava *(yauhra)* is the staple food for the coastal Miskito and it is also cultivated by those living inland. Eddoes or tanias *(duswa)* which are known also by the name "Coco", are cultivated for their edible tubers.

A semiwild yam and sweet potato *(tawa)* is eaten; pumpkins and squashes are also grown to some extent. Maize *(aya)* or Indian corn, which forms a staple food practically all over Central America, is sparsely and occasionally cultivated by the Miskito. When grown the corn is stored by hanging it under a roof over a low fire and smoked in order to prevent molding. Red or black beans *(snek)* are grown to a very small extent by the Miskito. Rice has been recently introduced. The grains of rice are heavy and rounded and differ from our native wild rice or those kinds ordinarily found in the tropics. The pejibaye *(supa)* is cultivated for its edible fruit; the Central American name for this plant appears to be taken from the Arawak language of Haiti. It is not a native plant in this area, so that it is found only in cultivated state and deserted palms indicate former village sites. The coconut palm *(kaya)* is found in a semiwild state. The Indians drink the juice of the nut, eat the tender kernel, and extract the oil. Oil is obtained by skimming the top of a boiling decoction of kernels and water.

Sugar cane *(kayu)* brought by the Spaniards during the sixteenth century is grown by the Miskito. They have a mill to extract the juice but have not learned to prepare sugar from it. They drink the fresh juice of the plant or allow it to ferment; sometimes it is boiled into a brown syrup which on cooling partially hardens to form a sort of brown sugar. Cacao which is indigenous, is sometimes cultivated but the pods are usually obtained from wild trees.

The most common native fruit trees are pineapples *(pihto)*, papaws or papayas *(twas)*, avocados or alligator pears *(sikya)*, soursops *(dwarsop)*, cashews *(kasan)* and plums *(polms)*. The common fruit *(dwarsop)*, cashews *(kasan)* and plums *(ploms)*. The common fruit dock, grapefruit, mangoes, breadfruit, tamarind, and rose apples. A few bushes of cotton, chili peppers and annato are found near every lodge.